

Work Order ID 83519

Thursday, April 19, 2012 10:28:02 AM

83519

Page 1

Item ID: D3511-041

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Wearplate Assembly

Start Date: 4/19/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 4/27/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

12-04-19

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D3511 | Rev A | | | | | | | | |

100

0.00

100

Waterjet

FLOW WATER JET

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3511 Dwg Rev: A Prog Rev: A 2-
Deburr if necessary Identify as D3511-1

304 .188

B12-5-19

110

0.00

110

QC

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

Quality Control

B12-5-19

120

0.00

120

QC

QC8- Inspect parts - second check

Memo

0.00

Quality Control

5/17/12

(4)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | A | | | | |
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NOTE: Date & initial all entries

Work Order ID 83519

83519

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Thursday, April 19, 2012 10:28:02 AM

Item ID: D3511-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wearplate Assembly
 Start Date: 4/19/2012 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 4/27/2012 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start *NR1*
 QC: Date: SPC (Y/N): Date: Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130 *130* Brake NC Brake NC | Small Fab Memo Bend fwd 90 deg. per dwg D3511 | 0.00 0.00 | | | | (4) | | | 12/05/23 |
| 140 *140* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | | | 4 | | | 12-05-23 |
| 150 *150* Large Fab Large Fab | Weld per dwg A/R S.S. rod Batch: 1114509 Large Fab Memo weld cups as per dwg | 0.00 0.00 | | | | (4) | | | 12-7-18 |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 83519

83519

Page 3

Thursday, April 19, 2012 10:28:02 AM

Item ID: D3511-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wearplate Assembly
 Start Date: 4/19/2012 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 4/27/2012 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|-----------------------------|
| 155 *155* QC Quality Control | QC9- Inspect visual per QSI004- Fusion Welds Memo | 0.00 0.00 | | | | 4x | 12.7.20 | | DAS 24 2-8 |
| 160 *160* Small Fab Small Fab | Small Fab Memo Form as per Dwg D3511 | 0.00 0.00 | | | | 1 | | | S 12/07/23 |
| 180 *180* QC Quality Control | QC5- Inspect part completeness to step on W/O Memo | 0.00 0.00 | | | | (46) | | | DAS 16 2-8 12/6/23 |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

83519

Thursday, April 19, 2012 10:28:02 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 4/19/2012 **Start Qty:** 4.00

4

Cust Item ID:

Required Date: 4/27/2012 **Req'd Qty:** 4.00

4

Customer:

Reference:

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

190

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00

190

Powdercoat

Memo

0.00

Powder Coating

START TIME:

FINISH TIME: _____

OVEN TEMPERATURE:

200

QC3- Inspect Part Finish

0.00

200

QC

Memo

0.00

Quality Control

210

Identify as per dwg & Stock Location: S1 of 34 0.00

0.00

210

Packaging

Memo

0.00

Packaging

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Thursday, April 19, 2012 10:28:09 AM

Page 1

Work Order ID: 83519

83519

Parent Item: D3511-041

D3511-041

Parent Item Name: Wearplate Assembly

Start Date: 4/19/2012

Required Date: 4/27/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A New Issue 06-05-04 JLM
IPP Rev:B New process 06-05-05 EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304S188 | | Purchased | No | | | 100 | sf | 17.0000 | 1.484 | 6.248421 | | | |

M304S188

304 SHEET 0.188

**

1812-5-19

Location

Loc Qty

Loc Code

MAT020

17

113161

3

113216

14

113216

(4)

D3503-1

Manufactured

No

150

Each

10.0000

8

32

D3503-1

Cup

**

12-7-19

Location

Loc Qty

Loc Code

WA030

10

76238

10

71843

X 16

~~83514~~

X 6

83517

16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

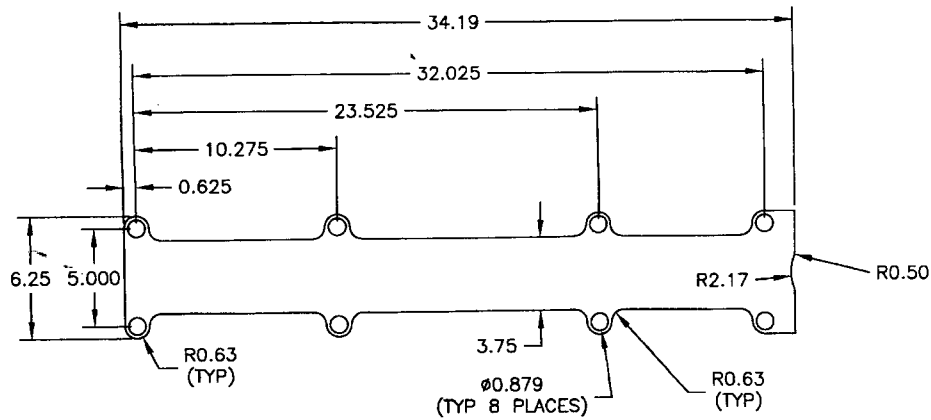
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | 5 | | |
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Part No: _____ PAR #: 032 Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: 032 Disposition: _____ QA: N/C Closed: _____ Date: _____

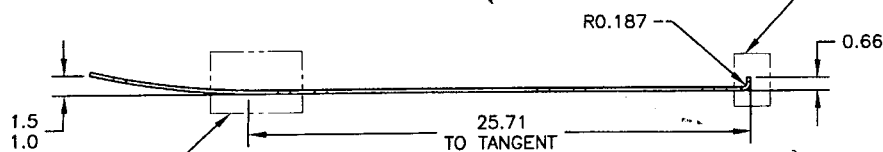
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries



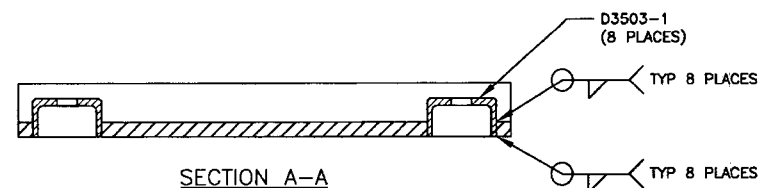
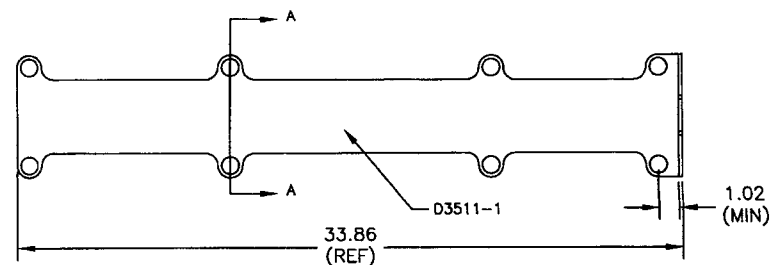
D3511-1F FLAT PATTERN

NOTE: BEND BEFORE WELDING



D3511-1 BEND DETAIL

NOTE: BEND AFTER WELDING



D3511-041 WELD DETAIL

SHOP COPY

D3511-041 WEARPLATE ASSEMBLY

- 1) MAKE D3511-1F WEARPLATE FROM: AISI 304/316 STAINLESS STEEL (0.188 THICK)
(REF DART MATERIAL SPEC. M304S7GA)
- 2) WELD PER DART QSI 004
- 3) FINISH: POWDER COAT ASSEMBLY BLACK SANDTEX (REF. 4.3.5.7) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.015

D3511-041 WEARPLATE ASSEMBLY PARTS LIST

| QTY -041 | PART NUMBER | DESCRIPTION |
|----------|-------------|--------------------|
| X | D3511-041 | WEARPLATE ASSEMBLY |
| 1 | D3511-1 | WEARPLATE |
| 8 | D3503-1 | CUP |

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| | | | | | |
|---------|----------|-------------|-------|----------|--|
| DESIGN | PH | DRAWN BY | PH | 06.04.04 | NEW ISSUE |
| CHECKED | J.H. | APPROVED | # | DART | DART AEROSPACE LTD. BARRINGTON, ONTARIO, CANADA |
| DATE | 06.04.04 | DRAWING NO. | D3511 | TITLE | WEARPLATE |
| | | SCALE | NTS | | |

RELEASED

06.04.25 #

83519
12-04-19

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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